

DDO antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI14650

Product Information

Application	WB
Primary Accession	Q99489
Other Accession	NM_003649 , NP_003640
Reactivity	Human, Rabbit, Pig, Dog, Horse, Bovine
Predicted	Human, Rabbit, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37535

Additional Information

Gene ID	8528
Alias Symbol	DASOX, DDO-1, DDO-2, FLJ45203
Other Names	D-aspartate oxidase, DASOX, DDO, 1.4.3.1, DDO
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-DDO antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	DDO antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	DDO
Function	Selectively catalyzes the oxidative deamination of acidic amino acids (PubMed: 1991137 , PubMed: 20603179 , PubMed: 23391306 , PubMed: 25747990 , PubMed: 28393897 , PubMed: 28560262 , PubMed: 28629864 , PubMed: 29292239 , PubMed: 31914658 , PubMed: 32553892 , PubMed: 9163533). Suppresses the level of D-aspartate in the brain, an amino acid that can act as an agonist for glutamate receptors (PubMed: 28560262). Protects the organism from the toxicity of D-amino acids (By similarity). May also function in the intestine (By similarity).
Cellular Location	Peroxisome matrix. Cytoplasm, cytosol. Note=Active in the peroxisomal matrix [Isoform 3]: Peroxisome matrix

Tissue Location

Expressed in epithelial cells of the proximal nephron tubules in the renal cortex (at protein level) (PubMed:12209855, PubMed:1991137). In the brain, expressed in the frontal, temporal, and occipital lobes of the cortex, hippocampus, striatum, diencephalon, brainstem, cerebellum, spinal cord, plexus choroiderous and ependyma (at protein level) (PubMed:12209855, PubMed:28560262). Expression is increased in the prefrontal cortex of schizophrenic patients (PubMed:25689573). Levels are normal in the superior frontal gyrus of patients with Alzheimer's disease (PubMed:30822420).

References

Setoyama C.,et al.J. Biochem. 121:798-803(1997).

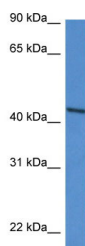
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Mungall A.J.,et al.Nature 425:805-811(2003).

Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Birkett C.,et al.Submitted (MAY-2005) to the EMBL/GenBank/DDBJ databases.

Images



WB Suggested Anti-DDO Antibody Titration: 1.0 µg/ml
Positive Control: HepG2 Whole Cell

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.